LEAD PENCIL MAKING

TRIP TROUGH THE FABER FACTORY NEAR NUREMBURG.

Treatment of the Graphite and Clay—Subjected to Intense Heat—The Workmen in Cedar—Final Stages of Development.

[Foreign Correspondence.]

We first enter a large basement room containing two rows of huge vats placed in a descending series, like steps. One row is devoted to the purification of the graphite, the other to that of the clay, and the process is the same for both substances. The raw material is thrown into the first vat and a quantity of water added; the mixture is then thoroughly stirred and afterwards allowed to settle, when the valuable ingredients rise to the top, or remain in succeeding strata, while the earth and stones sink to the bottom. A plug is then withdrawn about midway in the vat, and the thickly impregnated water falls into the second receptacle, while the mass of mud remains in the first. In this manner the material passes through water five times, when it has become sufficiently pure to be poured into a bag of thick cloth, which is subjected to a heavy press until the water is drained away, and the lead or clay is left in a solid mass, when it is placed in iron pans and dried in a furnace.

IN THE MILL.

After the lead and clay have been dried and mixed in suitable proportions, water is added, and the mass is put into a mill consisting of rows of separate stones, occupying the whole length of a large apartment, and connected with the steam engine by bands running along the upper wall. Under each mill-stone is a tub to collect the mass which slowly escapes from the tremendous pressure, and falls in thick gray drops from the wooden trough beneath the stone. This process is repeated ten or twelve times, when the mass is again dried in the oven. Afterwards it is laid upon a flat surface and hammered for a considerable time, then shaped into a cake and sent to the second press, from beneath which it falls in spirals of different sizes corresponding to the aperture through which it is pressed. These long spirals are collected and handed to operators who sit before a table and busy themselves in straightening the still flexible cords by laying them into boards grooved to a corresponding size. The boards when filled are laid upon shelves just below the ceiling where the warm air of the room will have most effect.

After a day or two the leads are placed in other hands to be cut to the length required for pencils, and carefully assorted, the perfect specimens are then laid in boxes and sent to another room, where they are enclosed in larger boxes of iron hermetically sealed and subjected to the intense heat of a furnace fire for five hours, when the lead is sufficiently tempered for writing purposes, and passes into the care of the workmen who furnish the wooden enclosure, though it must first bear the scrutiny of the faithful proprietor, who personally makes trial of a specimen of the contents of each box before he allows it to go forth under the stamp of his honest name.

WORKING IN CEDAR.

We may now leave the lead manufactory and enter the long building appropriated to the workmen in cedar. As we ascend the stairs the air is heavy with the spicy perfume, and great blocks and slabs of the pink and white wood, just as they were hewn in their native American forests, are lying in the passage. On opening the door which leads into the first work-room, we find ourselves in a cloud of dust and amidst heaps of soft shavings, the work of the many fine saws which are revolving so rapidly in their frames as to appear stationery, while the hoarse growl of the machinery below is exchanged for a sharp buzz, as though gigantic bees and flies were endeavoring to escape from spider-webs as strong as a ship's cable.

Here we see the whole process of cutting the wood for pencils. One workman holds the block under a saw which works with frightful force, and prepares the slabs for a more delicate machine, which saws them to the proper thickness; another set of tools, also worked by steam, gives the requisite angles to each half of the form; another makes the groove for the lead.

The next room is furnished with tables, around which the workmen sit, each performing a special task according to a systematized division of labor, and then giving what he has finished to another until it thus passes from hand to hand through the successive stages of development. One lays the lead into its groove, another glues it over, a third applies the cover of wood and glues the halves together. In the room devoted to the final process—the polishing, coloring, gilding, stamping, arranging, and packing of the pencils—only women and girls are employed.

According to Dr. Franklin.

"Will you give me them pennies now?" said a big newsboy to a little one after giving him a severe thumping. "No, I won't," exclaimed the one. "Then I'll give you another pounding." "Pound away. Me and Dr. Franklin agrees; Dr. Franklin says: 'Take care of the pence and the pounds will take care of themselves.'"

Coating for Firewire.

It is announced that an English inventor has lately devised a method of casting tin with a material resembling glass, which removes all danger of poison in canned goods.

Rev. Sam Jones: Dignity is the starch of the shroud. The more dignity a fellow has, the nearer dead he is. I expect to be as dignified as any of you when I get into my coffin.

The walls of Fort Sumter are still a mass of ruins, over which peer the frowning muzzles of a few old cannon.

The women of America use four times as much silk in proportion to population as the women of Europe.

A Severe Punishment.

[Harper's Bazar.]

Mamma (to Florry, who is ready for bed.—Now, Florry, come and say your prayers, dear.

Florry—Must I say my prayers every night, mamma?

Father (trying to read the paper)—Florence, if you do not say your prayers at once, you will not be allowed to say them at all.

Fashionable Ailmen.

[New York Mail and Express.]

A strain caused by tennis playing at Newport, malaria caught camping out in the Adriondacks, a sprained ankle occasioned by a fall playing polo, or an "awfully red face," the result of yachting at New London, are said to be the fashionable ailments among young people of both sexes.

THE RACE.

[Charles G. Blanden.]

"We'll run a race," quoth Thought to Heart,
"To find a just decree
If 'tis with you Love makes his home,
Or, Kardia, dear, with me."

"The goal, my sweet, shall be the mouth,
The eyes the signal give;
Sir Tongue shall then proclaim the seat
Where Love does really live."

That moment passed Diana fair;
Thought leapt the journey o'er!
Too late, too late; the throbbing heart
Was at the goal before.

Not Good Judges of Shawls.

[Lewiston (Me.) Journal.]

Hanging in a dry-goods firm's window were some elegant cashmere shawls. There is nothing more misleading, perhaps, than a cashmere shawl, but the ordinary lady purchaser prides herself on what she knows about such things. Recently two ladies entered the store and asked to look at the shawls. They were produced and displayed to the ladies, who pulled at them, and picked at them, and discussed them, and finally turned aside with an air of indifference, as if they had found no merit in them. The obliging lady clerk had become interested in their examination, and, as the ladies were about to turn away, she asked what they thought of the shawls

One of the women only spoke up. She stuck her long forefinger under one of the shawls and, pulling at it again, replied "O, nothing much. I saw the shawls in the window; that was all. I thought then that they were pretty cheap at $2, but I don't want 'em." The tag on the goods might have misled them, and perhaps the outward appearance of the rich fabric of the shawls might have aided in the deception. The tag was marked $200 instead of $2. The clerk explained the difference to her customers. Both of them, it is said, looked as though they would like to have the roof fall on them.

"Introspective" Insanity.

[Chicago Journal.]

Under this term Dr. A. M. Hamilton describes a class of cases in which there was a history of insanity, and the nervous temperament was manifested by various peculiarities—more often by a species of hyp chondriasis, by peculiarities of temper, and by acts of eccentricity causing the subjects to be looked upon as "queer." These terms are applied to the condition of mind which is manifested by a morbid feeling of doubt and consequent indecision under the most ordinary circumstances, when both the doubt and indecision are unreasonable in the extreme, but the individual, under the mandate of an imperative conception, yields more or less to his disordered emotions. Some years ago this condition of mind would have been spoken of by physicians and others as "hysteria" or, if it influenced the patient's conduct to any remarkable degree, the profession would have been at a loss for a proper explanation.

Mechanism of the Bee.

[Scientific American.]

An investigator into the mysteries of animal life asserts that a bee's working tools comprise a variety equal to that of the average mechanic. He says that the feet of the common working bee exhibit the combination of a basket, a brush, and a pair of pincers. The brush, the hairs of which are arranged in symmetrical rows, is only to be seen with the microscope. With this brush of fairy delicacy the bee brushes its velvet robe to remove the pollen dust with which it becomes loaded while sucking up the nectar. Another article, hollowed like a spoon, receives all the gleanings which the insect carries to the hive. Finally, by opening them, one upon another, by means of a hinge, these two pieces become a pair of pincers, which render important service in the construction of the combs.

A Little Girl's Courtesy.

[Cor. Philadelphia Record.]

I saw an exquisite story that Richard Grant White used to tell so mangled by a newspaper the other day that I was moved to do it justice by printing my recollection of it. It was told to show the native courtesy of well-bred Americans, and here it is:

When Gen. Washington was in New England he was entertained at dinner by a country gentleman who lived comfortably but quietly in his old-fashioned home far from town. When the general rose to go the little daughter of the host, not yet in her teens, opened the door for him. As he passed out in his stately way he bowed and said to the little maid: "I wish you a better office, my dear." "Yes, sir," she quickly replied, with a bow; "to let you in, sir."

How Flies Move Upon Smooth Surfaces.

[Scientific American.]

Some time ago Dr. J. E. Rombouts established the fact that flies attach themselves to smooth surfaces by the aid of a liquid secretion from the feet. This liquid, however, is not sticky, but the attachment is brought about by capillary attraction. Dr. Rombouts has recently strengthened his conclusions by an experiment. Several flies were confined to a glass plate by strips of paper, and the liquid that accumulated was sufficient to be perceptible to the naked eye. By the aid of experiments with glass balls, it was found that the adhesive power of the liquid was less than that of water, and about equal to that of olive oil. Hence capillary attraction is obviously the only force that could bring about the required result.

Card Memorials of the Dead.

[Chicago News.]

A firm out in San Francisco does a thriving business in card memorials of the dead. The decorations and verses are printed on them by the thousand, while the name, age, date of death, etc., are set in a mortised space. The papers so far east as New York are searched for notices of deaths, and specimens of the cards, printed on paper, are sent to the mourning family, and it rarely happens that at least one 50-cent card is not ordered.

Translate the Mottoes.

[Exchange.]

It is proposed to strike out the words "Sigillum Republicæ Massachusettensis" from the seal of that state and substitute "The Seal of the Commonwealth of Massachusetts." A writer in an eastern paper, noticing the above, suggests that the Latin mottoes of the various states be translated into English.

Salt as a Disinfectant.

The Medical Journal states that a few handfuls of common salt thrown daily into closets, and an occasional handful into wash-basins, goes far toward counteracting the noxious effects of the omnipresent sewer gas.

What Dio Lewis Says.

Dio Lewis is authority for the statement that no user of tobacco has ever headed his class at Harvard or at any other institution where class statistics have been preserved.

IN KANGAROO LAND.

AN "OVERLAND JOURNEY" FROM SYDNEY TO MELBOURNE.

Six Hundred and Seventy Miles on an Australian "Limited Express"—A Disagreeable Climate—Face of the Country.

[Cor. Inter Ocean.]

Most of the year the Australians have to provide against extreme heat. This is evident from the construction of the hotels with open courts, like those of Spain. The railway carriages too have double tops, as they have in India. So we try to keep comfortable by congratulating ourselves that we are not sweltering in an Australian summer. But it amuses us to hear these people talk of the severe American winter with a shudder! Although snow is very rare with them—except on the mountains—and the puddles in the streets seldom freeze over, their houses, churches, hotels and railroads are so entirely unfitted for even their moderately cold weather that we suffered more than we would at home in the severest Chicago blizzard.

ABOARD THE TRAIN.

Australian railways are patterned after those of England, so that the "overland journey" from Sydney to Melbourne is somewhat of an ordeal to an American. We went on the "limited express," which covers the 570 miles in eighteen hours. We found the train to consist of an English locomotive, a "luggage and a mail van," one compartment "carriage," and two sleeping-cars. The latter bore a faraway resemblance to an American sleeper. They were mounted on trucks like ours, and were entered from the end, but were lower and narrower to conform to the other carriages. Large panels in the sides swing out like doors between the sections, and the upper berths were hung on to them something like rigid hammers.

One section had to be devoted to mattresses and blankets, even during the day, for lack of room, and all the arrangements are so clumsy that it took the conductor an hour to make up four sections for the night, the whole car being strewn with odds and ends of lumber and bedding meanwhile, and the passengers trying to keep out of the way the best they could. A number of sections were divided from the rest of the car by a portable door or portiere, and assigned to the ladies. They entered one end of the car and the gentlemen the other. As there is no occasion for any one to walk through the train, as with us, the lady passengers are quite secluded, and can make their preparations for the night without embarrassment.

The train ran furiously all night. I lay in my narrow shelf in a cold perspiration, and grabbed frantically at the edges of the bunk to keep from being thrown out as the car struck sharp curves on the down grades. It seemed every instant as if we should be swung over by the centrifugal force, like the end boy in the game of "crack the whip." It was wretchedly cold, too, in spite of all the blankets in which we were rolled.

THE INCONVENIENCES.

I was just getting to sleep when we were all awakened and ordered up at 4:30. We breakfasted at 5 in the cold, frosty, morning air, in a room without heat, a most careless proceeding. Then we rode three miles further and had to turn out again. However, as it was just as warm outside the car as in it, we rather enjoyed the exercise. We were at the frontier, and as Victoria goes in for protection, while New South Wales believes in free trade, we had to have our luggage examined. Then, as the New South Wales engineers favor one gauge for their railroads and the Victorians another, it is impossible to run a train through intact from Sydney to Melbourne. The two colonies are intensely jealous of each other in every way, and so they make many things as inconvenient for themselves as they can. We therefore had to transfer ourselves and our "goods and chattels" to another train of ordinary continental compartment carriages.

We sat wrapped in shawls and blankets, in our hack style of conveyance, trying to keep partially comfortable. The colonials alight at every station and "brace" to keep warm; so, as the government derives revenue from the importation of liquors, it may be good policy not to heat the cars! There is a great deal of drinking in the colonies. I think more whisky is consumed per capita than in the United States, although the absorption of cornjuice is generally thought to be a specialty of Americans, as far as quantity is concerned.

The country through which we passed looks like portions of many of our western states. It is thickly wooded with eucalyptus and box trees except where cleared for farming. We passed many small villages, whence departure is made for the gold fields in the distant mountains. They resemble in size and appearance the towns in our western mining districts or the stations along the Central Pacific in Nevada. The cabins of "selecters" are seen at intervals, and occasional wheat fields are noticed, but most of the country is devoted to sheep and cattle raising. Both mutton and beef are largely exported to England, and horses are bred and sent to India.

A Principle of Hindoo Morality.

[Bengal Cor. N. O. Times-Democrat.]

There is a sect among the Hindoos called Jain. The first and highest principle of the Jain religion is never to kill, but always to protect all living creatures and promote their happiness. A rigid Jain would not trample on an insect while passing by the road. He carries a broomstick, and with it clears his path of all minute insects and worms. A Jain would gladly lie on a bedstead that is infested with bugs, and coolly allow his blood to be sucked by them.

An English gentleman once met a Jain, and told him that the water he used to drink was full of microscopic insects. The Jain would not believe him. The Englishman brought his microscope, and proved the truth of his assertion. The Jain looked surprised, and wept bitterly. He was a devoted follower of his religion and he proved his devotion by refusing ever again to take water, and the consequence was that he was soon attacked by a serious malady and died.

The English-educated young Hindoos of the day, it must be noted, disregard the above principle of Hindoo morality—the principle of being kind to all living creatures. The English-educated young Hindoo is a great lover of flesh diet. He eats mutton, and beef and bacon as voraciously as an Englishman. He has lately taken to shooting and hunting pretty largely. He cares little to feed birds with rice and corn, and laughs at the uneducated Hindoo who shows such marks of kindness toward the feathery tribe. He does not hesitate to kill a snake as soon as he sees it. But the number of such educated Hindoos is very small, only a drop in the vast ocean of Hindoo humanity

What Is Said of Confucianism.

[Demorest's Monthly.]

John Russell Young, the late minister to China, in a published interview states that Confucianism is the religion of the ruling classes of China; indeed, it can hardly be called a religion in any sense understood by Europeans or Americans, for it recognizes neither a God nor a life to come. Mr. Young characterizes it as a philanthropical and sentimental atheism. Confucianism is a secular religion embracing a highly developed ethical system. The Chinese are said to worship their ancestors, not in the sense that we worship God, but partaking more of the Roman Catholic reverence paid to patron saints. It is an exaggerated expression of filial affection. The Chinaman honors learning but he despises the warrior. Should a change occur, and a military chief ever become as admirable in the eyes of a Chinaman as he is in Europe or America, what is to prevent the myriads of Tartars and Mongols marching from Pekin to Paris? Mr. Young points out the fact, that it is the Tartar who has been the great invader of other nations, as witness Genghis Khan, Tamerlane, and Attila. The Chinaman is brave, docile and intelligent, and were a great leader to appear, they might overrun the civilized world by the mere force of numbers. Happily their contempt for war and warriors has so far saved civilization from this peril.

Christine Nilsson's Early Life.

[Chicago Times.]

Whenever Nilsson goes to Stockholm the king accords to her the honors usually reserved for queens. She is her majesty, the queen of the lyric stage, and is received openly in court. When she is invited to dine at the palace a royal carriage is sent to fetch her. In writing to her Oscar signs himself "Your sincere admirer and friend," and his subjects are not less enthusiastic. The journals are full of tracings of her glorious songstress career to its origin. She is the daughter, as told, of very poor parents, natives of the province of Gottland. They were Jack-of-all-trades and very musical.

Christine had at a very early age to do for herself, and was patronized by the owner of a ferry, who took country folks across one of the many lakes about the town of Wexo. She was started by him as an infant prodigy, and her singing and violin playing drew customers from a rival boat. When she was big enough she tramped with her father and mother from fair to fair. It is not to be supposed from that that she was on the low level of our tramps. Poverty is not so degrading in Sweden as it is here; and as hospitality is a universal quality among the peasantry of Scandinavia, Christine was not exposed to hardships in her roving childhood.

It was at a country fair that an influential Swedish gentleman discovered her musical genius. His name was Tornerhjeim, and he had heard her sing to a violin accompaniment which she played herself. At this time she was 14. M. Tornerhjeim opened to her successively the academies of Holmstadt and Stockholm, obtained for her the protection of the king and queen, and had her, when she was fit to go to Paris, sent there to study under Waitel.

The $200-Lawyer and the $20,000 One.

[Chicago Herald.]

"Did you ever notice the difference between a successful lawyer and a successful lawyer's clerk?" inquired a well-known gentleman of the reporter. "I have. The other day I went to see several lawyers about a matter of general interest to the profession. Happening into one of the little back offices where a cheap clerk and student was sitting with his feet upon a table reading a novel, or a brief, or some other fiction, I accosted him. He was an iceberg. It was a great effort for him to make a civil reply to a civil question. When he finally managed to speak a few words they fell from his lips like icicles breaking from a cornice.

"Having made one brief, unsatisfactory reply he evidently thought he had reached his limit, and steadily refused to answer any more questions, returning to his book like a hog to its wallow. Across the hall I found a lawyer who is making $20,000 a year. He was up to his eyes in work, and a stranger to me, but when I made my errand known he invited me to take a seat, laid down his pen, and talked for five minutes rapidly, warmly and to the point. Then he was done and I went away satisfied. I glanced at the clientless sprig across the hall. He was still reading his novel."

Not So Bad After All.

[Chicago Herald.]

Statistics show that the people of the United States from being one of the hardest drinking nations are becoming among the most sparing consumers of spirituous liquors. When Dr. Rush, in 1785, began his attack upon intemperance, whisky and rum were regarded as among the necessaries of life, and were "almost as free as water." In farm labor ardent spirits were a regular daily ration.

It is related by writers of the period that "in the country clergymen drank as hard as their parishioners; that women and children joined in the revels, and that it was no more uncommon to meet a tipsy clergyman than to see a woman or half grown boy staggering under an overload of spirits, or a farm hand lying blind drunk by the roadside." In Pennsylvania there were in 1790 no less than 5,000 stills in operation in a population of 434,373, or one still for every eighty-seven of the inhabitants.

New York Fancies in Eating.

["Uncle Bill's" Letter.]

There are changing fashions in drinking, as everybody knows, and the fancies in eating are equally inconstant. Just now New York epicures are in a revulsion from the elaborate French cookery that has for several years been in vogue. Educated palates are demanding a strongly contrasting plainness in viands. Steaks and chops are commonly chosen for dinners and suppers in the most extravagant restaurants, and there is a rage for distinctly southern dishes, such as terrrapin, canvass back duck, gumbo soup, and Maryland oysters. One of the private clubs devoted chiefly to careful eating has discharged its French chef and employed a negress skilled in Baltimore cookery, and the proprietor is coining money out of his specialty.

How Chestnuts Should Be Served.

[Chicago News.]

The favorite style of serving chestnuts this year will continue to be the pan-roast, although many prominent board of trade men will continue to eat them raw. A Frenchman, whose stand is near the Rock Island depot, has invented a new style, his method being to skin the nuts first and then roast them with butter in a popcorn shaker. They are said to be greatly relished by dyspeptic gentlemen in this style. For home use the chestnut fritter will continue to be the tid-bit for epicures.

A Big Gun.

At the Armstrong works, in England, a gun that will cast a one-ton shell fifteen miles has been made.